The Switcher Experts

IMC SKYNET ELECTRONIC CO.

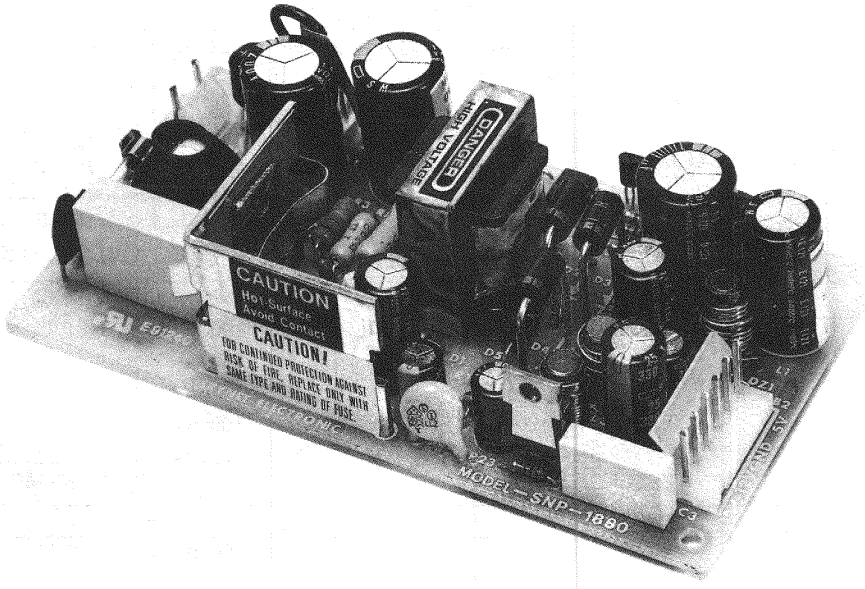
30W SNP-188 SERIES

FEATURES

- UL RECOGNIZED, FILE NO. E91240
- CSA CERTIFIED, FILE NO. LR57450
- COST EFFECTIVE DESIGN
- DC GIAN 45 dB
- BANDWIDTH 1KHz
- FCC & VDE CLASS B

APPLICATIONS

- HARD DISK SYSTEMS
- EXTERNAL FLOPPY SYSTEMS
- TAPE BACK-UP SYSTEMS
- TERMINALS
- MODEMS



DESCRIPTION

SNP-188 series are 30 watt switchers ranging from single output to multiple output models. Open frame and closed frame are available. All series have overvoltage crowbar protection on output # 1, power foldback protection on all outputs.

This series of power supplies feature a unique flyback circuit design. This technology permits lower minimum load requirements. built-in soft-start circuitry is incorporated to limit inrush current and eliminate turn-on overshoot.

Open frame SNP-1880, SNP-1881, SNP-1882, SNP-1883, SNP-1884 and SNP-1885 are UL recognized with File No. E91240. Closed frame model SNP-1880-1 is CSA certified, File No. LR57450-2. The remainder of the series are also designed to comply with UL and CSA safety standards.

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GENERAL SPECIFICATIONS

Input voltage ..... 100 VAC to 130 VAC
200 VAC to 260 VAC
Input frequency ..... 47 Hz to 450 Hz
Inrush current (Cold) ..... 15A at 115 VAC
30A at 230 VAC
Operation temperature ..... 0 to 50°C
Linear derating to 50% load at 70°C
Storage tempreture ..... −20°C to +85°C
Cooling ..... Free Air Convection
Efficiency ..... 70% Typical
Holdup Time ..... 15 ms

Overvoltage Type ..... Crowbar
Trip point ..... 6.2 V +/− 0.4 V
or Rated output + 2V
(SNP-1883, SNP-1888, SNP-1889)
Overload protection ..... Foldback
at 130% full load
Switching frequency ..... > 20 KHz
Designed in full compliance with .. UL 478, 1012
CSA 22.2
VDE 0806

OUTPUT SPECIFICATIONS

MODEL	OUTPUT VOLTAGE	LOAD			TOLERANCE +/−	RIPPLE NOISE	LINE REGULATION	LOAD REGULATION
		MIN.	RATED	MAX.				
SNP-1880	+5V	0.2A	3.0A	4.0A	1%	50 mV	0.5%	1%
	+12V	0A	1.0A	1.5A	5%	100 mV	1.0%	3%
	−12V	0A	0.2A	0.5A	10%	100 mV	1.0%	8%
SNP-1881	+5V	0.2A	3.0A	4.0A	1%	50 mV	0.5%	1%
	+12V	0A	1.0A	1.5A	5%	100 mV	1.0%	3%
	−5V	0A	0.3A	0.5A	10%	100 mV	1.0%	8%
SNP-1882	+5V	o.2A	6.0A		1%	50 mV	0.5%	1%
SNP-1883	+12V	0.1A	2.5A		1%	100 mV	0.5%	1%
SNP-1884	+5V	0.2A	3.0A	4.0A	1%	50 mV	0.5%	1%
	+15V	0A	1.0A	1.5A	5%	100 mV	1.0%	3%
	−5V	0A	0.2A	0.5A	10%	100 mV	1.0%	8%
SNP-1885	+5V	0.2A	3.5A	4.0A	1%	50 mV	0.5%	1%
	+24V	0A	0.5A	0.7A	5%	100 mV	1.0%	3%
SNP-1886	+5V	0.2A	2.0A	3.0A	1%	50 mV	0.5%	1%
	+12V	0.1A	1.8A	2.0A	5%	100 mV	1.0%	3%
SNP-1887	+5V	0.2A	2.0A	3.0A	1%	50 mV	0.5%	1%
	+15V	0.1A	0.7A	0.8A	5%	100 mV	1.0%	3%
	−15V	0.1A	0.7A	0.8A	5%	100 mV	1.0%	8%
SNP-1888	+15V	0.1A	1.0A	1.2A	1%	50 mV	0.5%	1%
	−15V	0.1A	1.0A	1.2A	5%	100 mV	1.0%	3%
SNP-1889	+24V	0.1A	1.25A		1%	50 mV	0.5%	1%
SNP-188A	+5V	06.A	3.0A	4.0A	1%	50 mV	0.5%	1%
	+15V	0A	1.0A	1.5A	5%	100 mV	1.0%	3%
	−12V	0A	0.3A	0.5A	10A	100 mV	1.0%	8%

Note:
1. Each output can provide up to maximum load, but total load cannot exceed 30 watts.
2. Ripple & Noise are measured by using a 12" twisted pair terminated with a 47 UF capacitor.
3. Tolerance is measured with all output at 50% rated load.
4. Line regulation are measured from low line to high line at rated load.
5. Load regulation are measured for +/− 40% load change from 60% rated load. Output #2, #3 measured with #1 at 60% of rated load.

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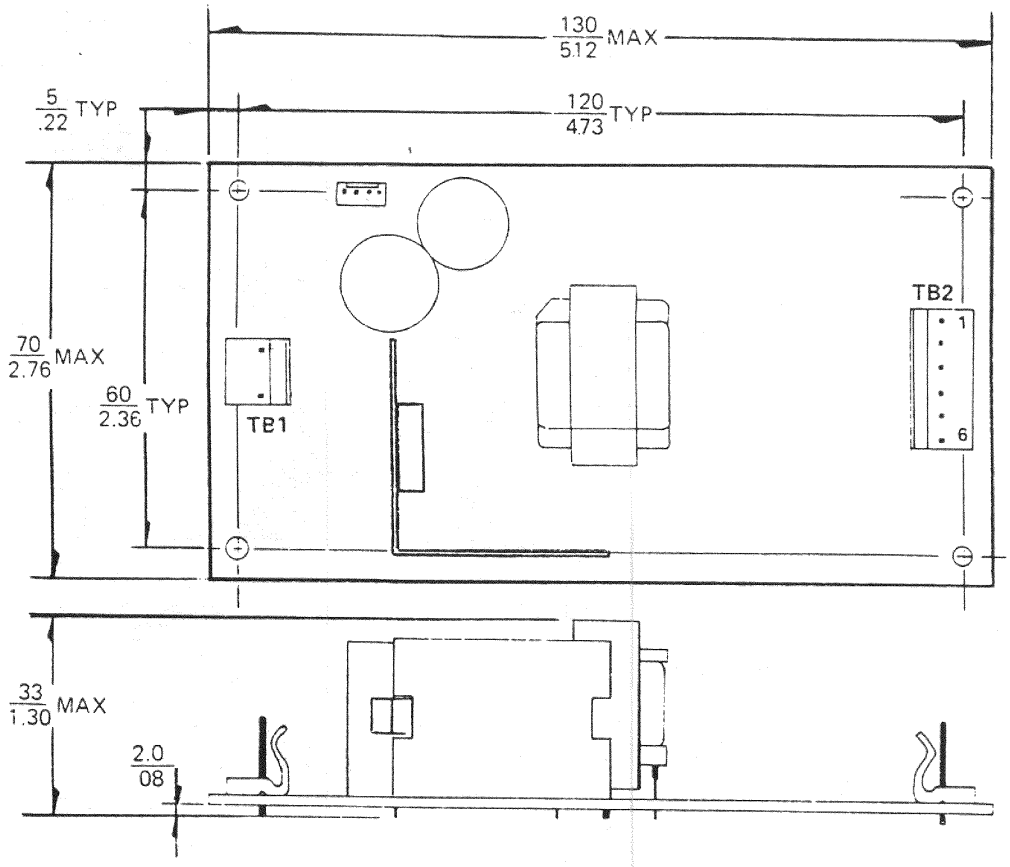
MECHANICAL SPECIFICATIONS



NOTE:

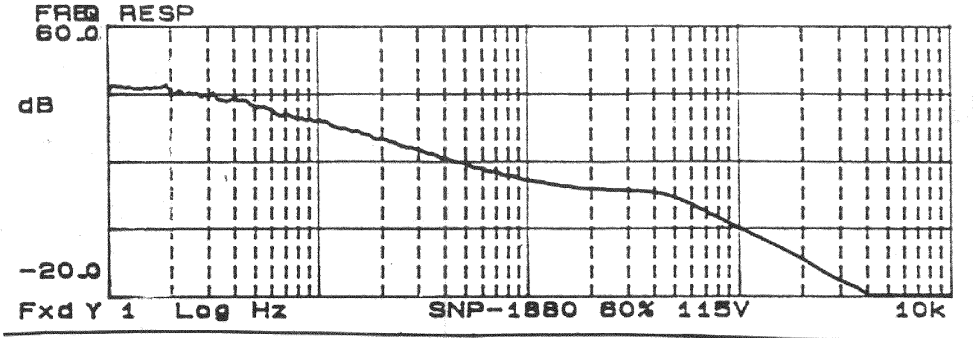
1. DIMENSIONS SHOWN IN: MM/INCH
2. P.C.B. SIZE:
   70mm x 130mm x 33mm
   2.76" x 5.12" x 1.30"
3. MOUNTING HOLE:
   120mm x 60mm
   4.73" x 2.36"
4. WEIGHT: 200 gram APPROX.
5. TB1 : AC INPUT
   MOLEX 09-65-2038
   TB2 : DC OUTPUT
   MOLEX 09-65-2068
   MOLEX 09-65-2048
   (for single output only)

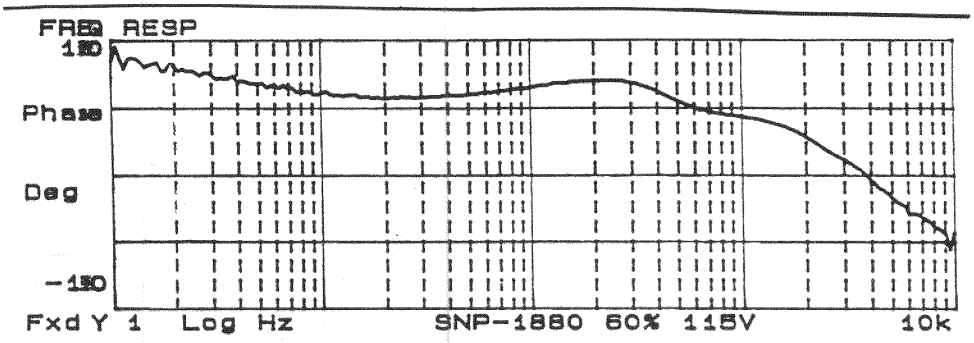
PIN ASSIGNMENT:

PIN / MODEL	1	2	3	4	5	6
SNP-1880	+5V	+5V	COM	COM	−12V	+12V
SNP-1881	+5V	+5V	COM	COM	−5V	+12V
SNP-1882	+5V	+5V	COM	COM		
SNP-1883	+12V	+12V	COM	COM		
SNP-1884	+5V	+5V	COM	COM	−5V	+15V
SNP-1885	+5V	+5V	COM	COM	+24V	+24V
SNP-1886	+5V	+5V	COM	COM	+12V	+12V
SNP-1887	+5V	+5V	COM	COM	+15V	−15V
SNP-1888	+15V	+15V	COM	COM	−15V	−15V
SNP-1889	+24V	+24V	COM	COM		
SNP-188A	+5V	+5V	COM	COM	+15V	−12V

STABILITY PERFORMANCE

1. FREQUENCY RESPONSE
   D.C. Gain > 45 dB
   Bandwidth > 1 KHz





2. LOAD REGULATION AND
   CROSS REGULATION

Test condition:
With 60% load on 5V output,
12V load change from 20% to
100% rated load.